Claims

What is claimed is:

1. A method, comprising:

   a) forming a product waveform by multiplying a positive signal waveform and negative signal waveform, said positive signal waveform and said negative signal waveform being representative of a logical transition within a differential signal; and

   b) determining the crossing point voltage of said logical transition within said differential signal by calculating the square root of a maximum of said product waveform.

2. The method of claim 1 further comprising sampling said positive and negative signal waveforms from an electronic circuit that transmits said differential signal.

3. The method of claim 2 wherein said sampling is performed with an oscilloscope.

4. The method of claim 2 wherein said electronic circuit further comprises a CMOS circuit.

5. The method of claim 1 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a low logic level of said positive and negative signal waveforms.

6. The method of claim 1 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a high logic level of said positive and negative signal waveforms.

7. The method of claim 1 further comprising displaying said product waveform.

8. The method of claim 7 wherein said product waveform is displayed on an oscilloscope.

9. A method, comprising:

determining the highest crossing point reached by a plurality of logical transitions within a differential signal by calculating the square root of the maximum height reached by a plurality of product waveforms, wherein each of said logical transitions has a corresponding product waveform, wherein each of said product waveforms is a product of a positive signal waveform and a negative signal waveform that represent its corresponding logical transition.

10. The method of claim 9 further comprising sampling said positive and negative signal waveforms from an electronic circuit that transmits said differential signal.

11. The method of claim 10 wherein said sampling is performed with an oscilloscope.

12. The method of claim 10 wherein said electronic circuit further comprises a CMOS circuit.

13. The method of claim 9 further comprising displaying said plurality of product waveforms.

14. The method of claim 13 wherein said plurality of product waveforms are displayed on an oscilloscope.

15. The method of claim 9 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a low logic level of said positive and negative signal waveforms.

16. The method of claim 15 further comprising sampling said positive and negative signal waveforms from an electronic circuit that transmits said differential signal.

17. The method of claim 16 wherein said sampling is performed with an oscilloscope.

18. The method of claim 16 wherein said electronic circuit further comprises a CMOS circuit.

19. The method of claim 15 further comprising displaying said plurality of product waveforms.

20. The method of claim 19 wherein said plurality of product waveforms are displayed on an oscilloscope.

21. A method, comprising:

determining the lowest crossing point reached by a plurality of logical transitions within a differential signal by calculating the square root of the maximum height reached by a plurality of product waveforms, wherein each of said logical transitions has a corresponding product waveform, wherein each of said product waveforms is a product of a positive signal waveform and a negative signal waveform that represent its corresponding logical transition.

22. The method of claim 21 further comprising sampling said positive and negative signal waveforms from an electronic circuit that transmits said differential signal.

23. The method of claim 22 wherein said sampling is performed with an oscilloscope.

24. The method of claim 22 wherein said electronic circuit further comprises a CMOS circuit.

25. The method of claim 21 further comprising displaying said plurality of product waveforms.

26. The method of claim 25 wherein said plurality of product waveforms are displayed on an oscilloscope.

27. The method of claim 21 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a high logic level of said positive and negative signal waveforms.

28. The method of claim 27 further comprising sampling said positive and negative signal waveforms from an electronic circuit that transmits said differential signal.

29. The method of claim 28 wherein said sampling is performed with an oscilloscope.

30. The method of claim 28 wherein said electronic circuit further comprises a CMOS circuit.

31. The method of claim 27 further comprising displaying said plurality of product waveforms.

32. The method of claim 31 wherein said plurality of product waveforms are displayed on an oscilloscope.

33. A machine readable medium having stored thereon sequences of instructions which are executable by a digital processing system, and which, when executed by the digital processing system, cause the system to perform a method comprising:

a) forming a product waveform by multiplying a positive signal waveform and negative signal waveform, said positive signal waveform and said negative signal waveform being representative of a logical transition within a differential signal; and

b) determining the crossing point voltage of said logical transition within said differential signal by calculating the square root of a maximum of said product waveform.

34. The machine readable medium of claim 33 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a low logic level of said positive and negative signal waveforms.

35. The machine readable medium of claim 33 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a high logic level of said positive and negative signal waveforms.

36. The machine readable medium of claim 33 wherein said method further comprises displaying said product waveform.

37. The machine readable medium of claim 36 wherein said product waveform is displayed on an oscilloscope.

38. A machine readable medium having stored thereon sequences of instructions which are executable by a digital processing system, and which, when executed by the digital processing system, cause the system to perform a method comprising:

determining the highest crossing point reached by a plurality of logical transitions within a differential signal by calculating the square root of the maximum height reached by a plurality of product waveforms, wherein each of said logical transitions has a corresponding product waveform, wherein each of said product waveforms is a product of a positive signal waveform and a negative signal waveform that represent its corresponding logical transition.

39. The machine readable medium of claim 38 wherein said method further comprises displaying said plurality of product waveforms.

40. The machine readable medium of claim 39 wherein said plurality of product waveforms are displayed on an oscilloscope.

41. The machine readable medium of claim 38 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a low logic level of said positive and negative signal waveforms.

42. The machine readable medium of claim 41 wherein said method further comprises displaying said plurality of product waveforms.

43. The machine readable medium of claim 42 wherein said plurality of product waveforms are displayed on an oscilloscope.

44. A machine readable medium having stored thereon sequences of instructions which are executable by a digital processing system, and which, when executed by the digital processing system, cause the system to perform a method comprising:

determining the lowest crossing point reached by a plurality of logical transitions within a differential signal by calculating the square root of the maximum height reached by a plurality of product waveforms, wherein each of said logical transitions has a corresponding product waveform, wherein each of said product waveforms is a product of a positive signal waveform and a negative signal waveform that represent its corresponding logical transition.

45. The machine readable medium of claim 44 wherein said method further comprises displaying said plurality of product waveforms.

46. The machine readable medium of claim 45 wherein said plurality of product waveforms are displayed on an oscilloscope.

47. The machine readable medium of claim 44 wherein said positive and negative signal waveforms have a 0.0 voltage reference that is aligned with a high logic level of said positive and negative signal waveforms.

48. The machine readable medium of claim 47 wherein said method further comprises displaying said plurality of product waveforms.

49. The machine readable medium of claim 48 wherein said plurality of product waveforms are displayed on an oscilloscope.